



**PATIENT**

Charlie Thornton

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered Male

**AGE**

10 Years

**WEIGHT**

86.7 Pounds

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Heather McNemar

**HOSPITAL NAME**

Animal Care Clinic of  
Flanders

**REFERRING VET**

Dr. Hallihan

**INVOICE**

15913

**DATE**

6/7/22

**PRESENTING CLINICAL SIGNS**

History: \*serosanguineous fluid extracted\* decreased appetite, doesn't want to be around family, lethargic, neutrophilia, hematuria on enrofloxacin 136mg - 1.5 tab SID for ten days, vitamin supplement gave pvp this am - used 1.3mL of torb

Abnormal PE/Chem/CBC/UA Results: ALT up > 1000, alk up 678, amyl up 1613, hct down 29.1, hgb down 10.9, mcv down 60.5, retic - hgb down 20.5, wbc up 21.43, wbc 2-3, protein rbc 4.81, neu up 17.29, mono up 1.38, plt down 126, mpv down 14.8 u/s - rbc up 4-10, blood 3+, wbc 2-3, protein 2+, bilirubin 1+ specific grav, 1.016

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder was mildly distended in size yet subjective normal tone. Anechoic urine was present. No sediment or calculi noted. No overt evidence of inflammatory or neoplastic wall criteria. The urethra was normal to a depth of 3.0 cm.

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 1.1 cm in diameter.

The area of the aortic trifurcation was free of pathology. No evidence of medial iliac or sublumbar lymphadenopathy.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 7.8 cm in length. The right kidney measured 7.8 cm in length.

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.87 cm width at the caudal pole and 0.93 cm width at the cranial pole.

The right adrenal gland was not definitively visualized.

**Spleen**

The spleen was enlarged in size. Lateral and medial capsule contour asymmetry noted. Generalized moderate to marked nonhomogeneous splenic parenchyma noted. Splenic vascularity was subjectively normal.

**Liver**

The liver was enlarged in size with primarily symmetrical yet rounded hepatic contour. Nonuniform hepatic parenchyma, exhibiting mild mixed echogenicity was noted. A solitary to intermittent isoechoic to mildly hypoechoic intraparenchymal nodules noted, an example measured 4.2 cm in diameter.

The gallbladder was non-distended in size with mild gallbladder debris. The gallbladder was otherwise normal. The cystic and common bile ducts were normal.

**Gastrointestinal**



<b>PATIENT</b>	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.
Charlie Thornton	
<b>SPECIES</b>	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.
Canine	Normal visible colon wall layers were present with apparent formed feces in lumen.
<b>BREED</b>	<b>Pancreas</b>
Golden Retriever	The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia. This change is likely consistent with age-related pancreatic changes.
<b>SEX</b>	<b>Free Abdomen</b>
Neutered Male	Mild to moderate volume peritoneal free fluid was present. Generalized primarily perisplenic to perihepatic hyperechoic mesentery noted. No overt evidence of significant lymphadenopathy.
<b>AGE</b>	<b>Other</b>
10 Years	A rapid view of the heart revealed mild volume pericardial free fluid. Potential for mild subjective myocardial thickening in the area of the right atrioventricular groove possible yet not definitive. A definitive mass in the area of the heart base or right atrium/auricle was not visualized.
<b>WEIGHT</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
86.7 Pounds	<b>Primary Findings</b>
<b>INTERPRETED BY</b>	<ul style="list-style-type: none"> <li>• Asymmetrical splenomegaly, exhibiting diffuse moderate nonhomogeneous parenchyma</li> <li>• Hepatomegaly, exhibiting nonhomogeneous to nodular parenchyma</li> <li>• Mild to moderate volume peritoneal free fluid</li> <li>• Concurrent mild volume pericardial effusion, potential subjective mild thickening in the area of the right atrioventricular groove</li> </ul>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
<b>IMAGING PERFORMED BY</b>	<b>Secondary Findings</b>
Heather McNemar	<ul style="list-style-type: none"> <li>• Mild chronic renal changes</li> <li>• Overtly normal urinary bladder</li> </ul>
<b>HOSPITAL NAME</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Animal Care Clinic of Flanders	Although sampling is required for further assessment and potential definitive diagnosis, the hepatosplenic presentation is most concerning for multicentric hepatosplenic neoplasia, such as sarcoma, round cell neoplasia or other. Mild pericardial effusion is strongly concerning for potential early cardiac metastasis, although a definitive cardiac or pericardial mass lesion was not overtly visualized. Non-neoplastic etiologies, such as hepatosplenic or multicentric inflammatory disease is possible yet thought less likely.
<b>REFERRING VET</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Dr. Hallihan	Assuming normal clotting status and using a 25-gauge needle, hepatosplenic FNA could be considered for screening cytology and potential for oncology consult. Correlation with abdominal effusion analysis, cytology +/- culture and sensitivity, if evidence of inflammatory cells, recommended. No
<b>INVOICE</b>	
15913	
<b>DATE</b>	
6/7/22	



**PATIENT**

overt evidence of cardiac tamponade at this time. Very guarded to suspect unfavorable prognosis indicated.

Charlie Thornton

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered Male

**AGE**

10 Years

**WEIGHT**

86.7 Pounds

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Heather McNemar

**HOSPITAL NAME**

Animal Care Clinic of  
Flanders

**REFERRING VET**

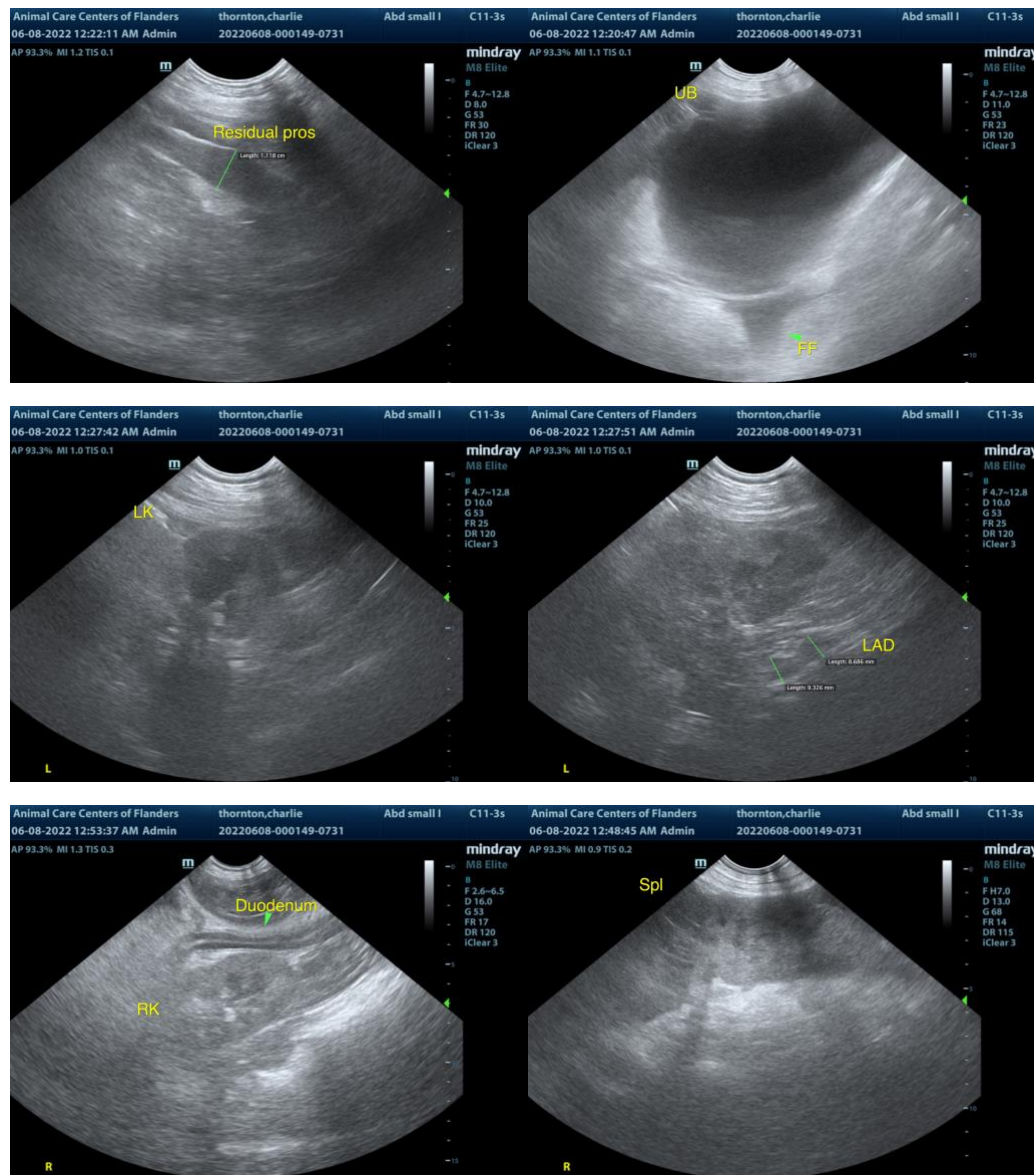
Dr. Hallihan

**INVOICE**

15913

**DATE**

6/7/22





**PATIENT**

Charlie Thornton

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered Male

**AGE**

10 Years

**WEIGHT**

86.7 Pounds

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Heather McNemar

**HOSPITAL NAME**

Animal Care Clinic of  
Flanders

**REFERRING VET**

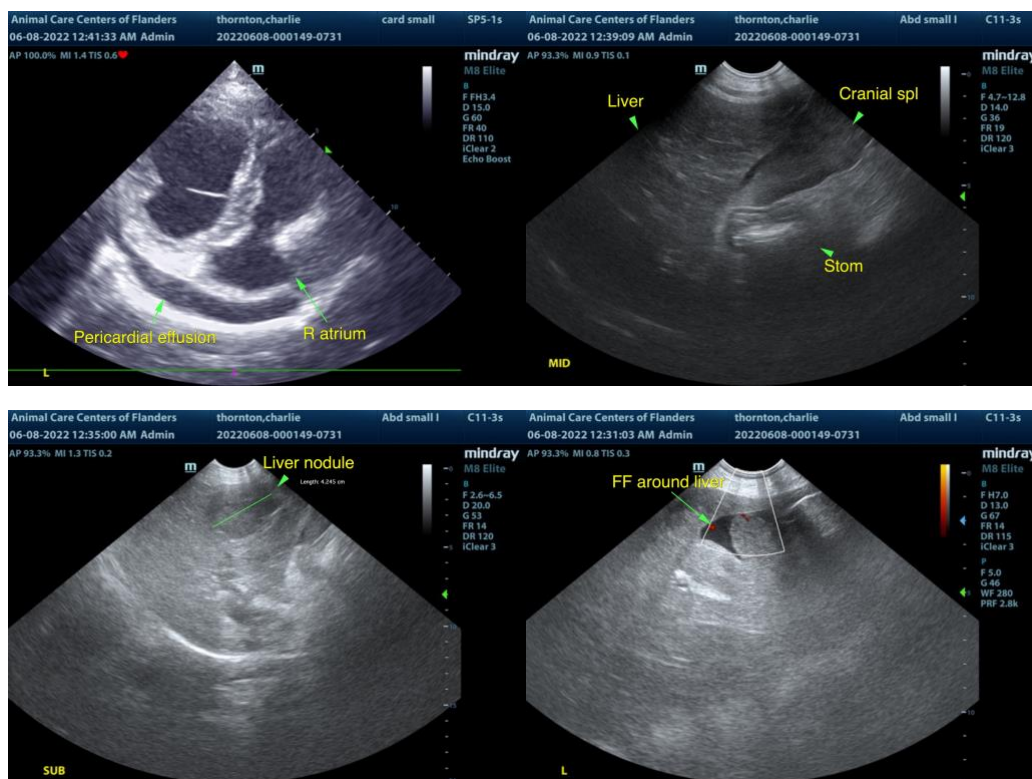
Dr. Hallihan

**INVOICE**

15913

**DATE**

6/7/22



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
info@SonoPath.com